

26. (Reiterated) The method of claim 25, wherein said protein kinase A inhibitor is (2-p-bromocinnamylaminoethyl)-5-isoquinolinesulfonamide, an enantiomer of dibutyryl cAMP, or an enantiomer of cAMP.

The claims presented above incorporate changes as indicated by the marked-up versions below.

9. (Amended Twice) The method of claim 1, 2, 3 or 4, wherein said agent molecule that overcomes morphogen inhibition is a cytokine antagonist, a retinoid antagonist, or a protein kinase A inhibitor.

21. (Amended Twice) The method of claim 20, wherein said neuropoetic cytokine receptor is an LIF receptor or a ~~CTNF~~ CNTF receptor.

In reply to the outstanding Restriction Requirement, mailed Jun. 28, 2002, in connection with the above application, Applicants hereby elect with traverse, and for search purposes only, species a (a cytokine antagonist) from the species of molecules that overcome morphogen inhibition; and species d (a retinoid receptor) from the species of receptor for an endogenous ligand, for the reasons which follow.

Applicants note that the Examiner has acknowledged amendments to claims 1-4, 8, 9, 11, 12, 15-17, 19, 21, and 24-28, and that Groups I-III has been rejoined in view of the amendments. Applicants have also amended claims 9 and 21 to correct typographical errors. Applicants submit that there is no narrowing of scope in any respect due to these amendments. Support can be found throughout the specification.

Claims 13-15 and 27-32 are withdrawn from further consideration as being drawn to non-elected species and non-elected invention. Applicants will cancel claims 27-32, drawn to a non-elected invention, upon indication of allowable subject matter. However, Applicants wish to point out that claims 13-15 are drawn to a non-elected species belonging to a Markush group. As Applicants have pointed out in the previous reply filed on April 18, 2002, "If the members of the Markush group are sufficiently few in number or so closely related that a search and examination of the entire claim can be made without serious burden, the examiner must examine all claims on

the merits, even though they are directed to independent and distinct inventions" (MPEP 803.02). In addition, Applicants respectfully reiterate that the search of the Markush-type claim will be extended to non-elected species should no prior art be found that anticipates or renders obvious the elected species (MPEP 803.02).

Claims 1-12 and 16-26 are presently under consideration in the instant application.

The Examiner has imposed further election of species requirement with respect to certain species of the above-identified invention. These species include the following: 1) the species of molecules that overcome morphogen inhibition, including species a-c; and 2) a species of receptor for an endogenous ligand (that a molecule binds), including species d and e.

In response, Applicants have elected with traverse species a (a cytokine antagonist) from the species of molecules that overcome morphogen inhibition; and species d (a retinoid receptor) from the species of receptor for an endogenous ligand. These species are elected for search / examination purposes only. Claims readable on the elected species a include claims 1-12, and 16-21. Claims readable on the elected species d include claims 1-9, 16-19, 22 and 23.

As to the species election requirement 1), Applicants submit the species a and b listed by the Office Action at least partially overlap with each other, therefore such delimitation of species does not comply with MPEP 806.04(f): "Claims to be restricted to different species must be mutually exclusive... This is frequently expressed by saying that claims to be restricted to different species must recite the mutually exclusive characteristics of such species."

In the instant case, the term "cytokine antagonist" (species a) at least encompasses such molecules as cytokine binding proteins and cytokine receptor binding proteins (such as an anti-gp130 monoclonal Ab of claim 12). Both types of molecules interfere with the binding between an endogenous cytokine and its receptor, thus are all cytokine antagonists. On the other hand, cytokine binding proteins described above are also "molecules that binds an endogenous ligand" (species b), thus the scope of species a and b overlap with each other. Also, since claim 19 reads on both species a and b, and does not recite the mutually exclusive characteristics of species a and b, Applicants submit that such restriction of species appears to be improper.

In addition, Applicants note that claims 1-9 and 16-18 are generic claims linking elected and non-elected species in group 1), claims 1-9 and 16-19 are generic claims linking elected and non-elected species in group 2). Pursuant to MPEP 809.04, “[i]f a linking claim is allowed, the examiner must thereafter examine species if the linking claim is generic thereto, or he or she must examine the claims to the non-elected inventions that are linked to the elected invention by such allowed linking claim.” Thus, restrictions imposed on species encompassed by generic claims must be withdrawn upon indication of an allowable generic claim (MPEP 809). In other words, upon the allowance of a generic claim, Applicants are entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141 (MPEP 809.02(a)).

The Examiner may address any questions raised by this submission to the undersigned at 617-951-7000. Should an extension of time be required, Applicants hereby petition for same and request that the extension fee and any other fee required for timely consideration of this submission be charged to Deposit Account No. 18-1945.

Respectfully Submitted,

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